

USCG 2D

Pilot Project

***Instructions and Back-up
Information***

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GETTING STARTED

1. Turn PC and Printer on.
2. Have a camera attached to the COM1 port in back of the computer.
3. Do Not create a Windows password - this only causes confusion.
4. Windows will appear with a USCG folder.
5. Inside the USCG folder are several executable files:
 - All MicroSoft Office applications and other Ops files are provided in this directory (Word '97, Excel, File Manager, CD Player, ...)
 - **MixMedia** is the software that enables the user to view the symbols read with the Metanetics reader, take a picture and that a picture to a signature using MaxiCode. Remember to have the reader in COM1 and the baud rate on the reader set to 56,000. There are two formats that can be used: Raw Data which only produced the text that is in the symbology; and MixMedia which places a time stamp (generated from the computer) above the text that is in the symbol. Only use MixMedia format while in MixMedia software. If you inadvertently forget, odd characters will appear and the word magic will also appear.

Features of the Reader:

 - Just pull the front trigger to decode and view a barcode or 2D symbology. The reader will beep every time a symbol is decoded.
 - When taking a picture image, pull the front trigger to get the crosshairs for focusing and release, then press in the back button below the color indicators and release. A long beep will be heard and the image will start processing across the screen. This image is stored on c:\mm4-0c\output\original.bmp. The file is replaced each time a new picture is taken.
 - When taking a signature image, make sure the reader is high enough from the symbol to see the signature underneath. It is also a good rule of thumb to start the crosshairs near the signature and move up.
 - **LmwPrint** (Label matrix for Windows Printing Version) is the software that enables the user to print pre-designed labels. Most labels are either keystroke required or consecutive order oriented. If the label has already been designed, this is a great and easy tool to just print your labels. The label printer is an Eltron and it is selected as the default.
 - **Lmw** (Label Matrix for Windows) is the software that enables the user to create and print labels. Always remember with the Eltron printer,

the label must start at ½" below the top or it will run over the edge and not printer the top portion. The StrandWare books are provided to aide the user in creating labels.

- **WinWedge** is a tool used to allow the reader to represent a keystroke from a keyboard. Do not have WinWedge open while in MixMedia. The following applications will be used with a special designed version of WinWedge:
 - **WinWedge Notepad 56 - COM1** is the WinWedge program especially designed to be used with **Notepad**. Notepad has the ability to be saved as a text file, unlike MixMedia. The Reader is located in COM1 and the baud rate is 56,000. Open this application by double clicking the icon, a TAL Enterprises screen will appear and then minimize to the bottom of the screen. Once this takes place, open Notepad by double clicking the icon. Use the reader to read any symbology. Make sure that once you close Notepad, that you close the WinWedge software also. If not, you may need to open another WinWedge program that is not compatible with the Notepad version and it will cause a conflict.
 - **WinWedge LmwPrint 56 - COM1** is the WinWedge program especially designed to be used with **LmwPrint**. This allows the user to integrate existing barcodes or 2D codes (with no keyboard input) into the "Keyboard Prompt" portion of the LmwPrint screen. The Reader is located in COM1 and the baud rate is 56,000. Open this application by double clicking the icon, a TAL Enterprises screen will appear and then minimize to the bottom of the screen. Once this takes place, open LmwPrint by double clicking the icon. Use the reader to read any symbology. Make sure that once you close LmwPrint, that you close the WinWedge software also. If not, you may need to open another WinWedge program that is not compatible with the LmwPrint version and it will cause a conflict.
 - **WinWedge QVTNet 56 - COM1** is the WinWedge program especially designed to be used with **QVTNet**. QVTNet allows the user to access the AMMIS Host. The Reader is located in COM1 and the baud rate is 56,000. The following items should be done in order to sign onto AMMIS:
 1. Open WinWedge QVTNet by double clicking the icon - a TAL Enterprises screen will appear and then minimize to the bottom of the screen.
 2. Open QVTNet by double clicking the icon.
 3. Click on File

4. Click on Open
5. Click on ARSC
6. Click on OK
7. Login to AMMIS (use the keyboard or 2D alpha/numeric card)

The user is then signed on to AMMIS and normal operation can then take place including using the reader to read a barcode or 2D code for finding information. To disconnect from the host after signing off the application, do the following:

1. Click on File
2. Click on Disconnect
3. Click on File again
4. Click on Exit

Make sure that once you close QVTNet, that you close the WinWedge software also. If not, you may need to open another WinWedge program that is not compatible with the QVTNet version and it will cause a conflict.

6. Most of the above information is also used on the HardBody computer. Remember to use the pen like a mouse, double hit the icon - just like double clicking the mouse.

When the HardBody boots up, cancel the sign-on to the network. Close Software Wedge - com1 if signing on to Ammis or using mixmedia. Make sure the-camera is in com1 (furthest away from the power button).

To sign-on to Ammis, open Program Manager. Open WinWedge QVTNet, it will minimize to the bottom of the screen. Open QVTNET(Ammis). Make sure the keyboard (Pen Pallet) is open. In QVTNET, click File, then Open. Choose configuration "ARSCUSCG" + OK. Logon to AMMIS.

										
A	a	B	b	C	c	D	d	E	e	F

										
f	G	g	H	h	I	i	J	j	K	k

										
L	l	M	m	N	n	O	o	P	p	Q

										
q	R	r	S	s	T	t	U	u	V	v

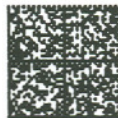
							
W	w	X	x	Y	y	Z	z

									
1	2	3	4	5	6	7	8	9	0

									
!	@	#	\$	%	^	&	*	()

									
.	-	=	+	[]	{	}	(

									
;	:	'	"	,	.	<	>	/	?



This is a test for the United States Coast Guard. By the time this message is finished, there will be 190 characters typed in this message. Characters include spaces, text and punctuation.



144048798



144651496



144852103



143901437



144396128



144466468



144471445



01HR19574



01HR20518



144048798



144651496



144852103



1HR23313



ELTRON 3643 INK ROLL INSTALLATION

1. Turn printer off (Left side - back corner).
2. Open printer cover by pushing in both green side holders & raise up.
3. Raise in roll head by releasing the left green pull tab.
4. Place the new ink roll flat side down/shiny side up.
5. Leave a little extra hanging from the back.
6. Raise the ink roll head.
7. Loop the material down the back and underside of the printer head.
8. Pull the material to the front.
9. Make sure the flat side of the material is down.
10. Loop the ink roll around the shiny metal bar and up.
11. Roll ink onto take-up spool and tape over the top (clockwise) to secure the ribbon.
12. Roll the spool about 2 spins for an added grip.
13. Press in roll head back into place snugly (2 snaps).
14. Close printer cover.
15. Turn printer on.

ELTRON 3643 LABEL MATERIAL INSTALLATION

1. Turn printer off (Left side - back corner)
2. Open printer cover by pushing in both green side holders & raise up.
3. Remove large black spool near the back of printer.
4. Slide label material onto black spool - end of roll facing you.
5. Replace label material/black spool into printer.
6. Raise ink roll head by pulling left green tab.
7. Slide material through the bottom of printer head.
8. Adjust white alignment brackets to fit material using green spindle on left of brackets.
9. Pull material to the edge of metal piece in front of printer.
10. Snap snugly (2 snaps) the ink roll head back into place.
11. Close printer cover.
12. Turn printer on.

LABEL PRINTER INSTRUCTIONS

1. Open Label Matrix V4.41 Print software (double click icon).
2. Select file name USCG#. This file has been designed specifically for this pilot project.
3. Make sure the print range is "All" and the printer selected is "Eltron TLP/LP 3642".
4. Select Print.
5. Make sure the Eltron printer is on.
6. Insert the unique Tracking Number for the given part.

HARDWARE/SOFTWARE EVALUATION FORM

Employee

Name: _____

Phone: _____

Please mark the box that best answers the following questions:

Camera: Vendor _____

	Yes	Sometimes	No	N/A
1. Is the camera comfortable to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the camera function under all light conditions in your facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is the working distance (focal range) sufficient for the intended application?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the camera tolerate normal hand motion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Did the user have difficulty reading any particular symbol type?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Will the camera read all symbol sizes required by the user?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the decoding speed sufficient for the intended application?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were any camera-to-computer interface difficulties encountered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Label Hardware/Software:

9. Is the printer easy to operate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is the label software easy to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the ink ribbon easy to change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the stock material easy to change?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Is the print speed fast enough for the application?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Does the software provide all fonts required for application?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Computer:

15. Is the computer easy to operate (pen/screen)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Is the computer easy to handle?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Is the computer easy to hold for a long period of time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Does the battery last for an entire shift?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Is the size of the screen easy to view?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Is the image clear under all users lighting conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments/Recommendations? _____

Label/Marking Discrepancy Report

Date:

Employee Name: _____

Phone: _____

Fax: _____

Report Number: _____

Test Cycle/Inspection Period

Description of Marked Part

Aircraft Type: _____ Aircraft Tail Number: _____

Part Number: _____ Part Serial Number: _____

Tracking Number: _____

Part Nomenclature: _____

Label Evaluation (Check Appropriate Blocks)

Label Stock 10

- ☐ Bubbled/Blistered
- ☐ Discolored
- ☐ Lamination Separated
- ☐ Burnt
- ☐ Peeling
- ☐ Distorted
- ☐ Melted

Symbol Marking 11

- ☐ Faded
- ☐ Smeared
- ☐ Scratched
- ☐ Abraded
- ☐ Color change
- ☐ Poor Edge definition
- ☐ Streaks
- ☐ Repetitive Voids in Marking

Comments:

12

This section to be filled in by BNA

Label

Description: _____

Size: _____ Stock Type: _____ Overcoat or lamina: _____

Ink Type: _____ Adhesive Type: _____

Label/Marking Discrepancy Report Requirements:

1. Employee's name, phone and fax number need to be on each form for tracking purposes.
2. The Report Number is supplied by BNA for traceability.
3. The length of time that the part or component had been on the aircraft since the installation of the label.
4. The type of aircraft that the labeled part or component was installed on.
5. The number on the aircraft tail.
6. The part number that was located on the labeled part or component. N/A if not available.
7. The serial number that was located on the labeled part or component. N/A if not available.
8. Tracking number used for the USCG Pilot Project.
9. Identify where the part was located.
10. Check the appropriate box or boxes that best describes the visible problem with the label material.
11. Check the appropriate box or boxes that best describes the visible problem with the symbol marking (ink).
12. Please submit any additional comments associated with the discrepancy.
13. This area is to be filled out by BNA personnel only.

Permanent Marking Discrepancy Report

Date:

Employee Name: _____

Phone: _____

Fax: _____

Report Number: _____

Test Cycle/Inspection # _____

Description of Marked Part

Aircraft Type: _____ Aircraft Tail Number: _____

Part Number: _____ Part Serial Number: _____

Tracking Number: _____

Part Nomenclature: _____

Permanent Marking Symbol Evaluation (Check Appropriate Blocks)

Part Surface Conditions which Impede Decoding _____

☐ Surface Discoloration

☐ Abrasion

☐ Scratches

☐ Symbol Backfill Discolored

☐ Symbol Backfill Missing

☐ Staining

☐ Wear

☐ Corrosion

☐ Tarnishing

☐ Marking Faded

☐ Other: _____

Was there an obvious cause of damage: Yes No (Circle one) _____

If yes, please explain: _____

Comments: _____

_____ -

This section to be filled in by BNA

Marking Description: _____

Size: _____ Material Type: _____ Marking Type: _____

Marking Media if applicable: _____

Permanent Marking Discrepancy Report Requirements:

1. Employee's name, phone and fax number need to be on each form for tracking purposes.
2. The Report Number is supplied by BNA for traceability.
3. The length of time that the part or component had been on the aircraft since the installation of the label.
4. The type of aircraft that the labeled part or component was installed on.
5. The number on the aircraft tail.
6. The part number that was located on the labeled part or component. N/A if not available.
7. The serial number that was located on the labeled part or component. N/A if not available.
8. Tracking number used for the USCG Pilot Project.
9. Identify where the part was located.
10. Check the appropriate box or boxes that best describes the visible problem with the permanent symbol marking.
11. If there was an obvious cause for the damage please answer and explain.
12. Please submit any additional comments associated with the discrepancy.
13. This area is to be filled out by BNA personnel only.

Data Format**Baud Rate****Raw (Default)**

0250

Enable 9600 bps (Default)

0014

Mix Media

0251

Enable 19200 bps

0016

Enable 56000 bps

0019

Quick Reference for commonly used Metanetics Reader format changes

HardBody Tips

- Turn on the HardBody with the rubber switch on the top right side of the computer. All programs needed for the pilot are located in the USCG Windows Directory.
- Software Wedge is used to transmit data from the camera into a designated field. This program is started automatically when the computer is turned on. Close Software Wedge before running MixMedia.
- MixMedia is the s/w used to receive/view the data from the reader, capture a signature and view an image. If you need to save the data received, use Terminal. Always make sure that the baud rate is set correctly between the s/w and the reader. To save the data transmitted, activate and minimize Wedge4notepad, then activate Notepad. Scan the parts and save the data. If Software Wedge (com1) is active at the bottom left side of the screen, only open Notepad.
- During RF Transmission tests, make sure the reader is connected to COM1.
- To calibrate the pen, go to the USCG Windows Directory and activate Micro Touch Touch Screen and follow instructions during Calibration.
- Suspend the computer by pressing the button on front lower right (the solid greenish light will begin flashing) before hot swapping the Duracell battery.
- The computer will go to sleep, to save the battery life, after 1 minute of no activity. Touch the screen with the Pen to reactivate.
- How to use the Pen for Windows:
 - Under Microsoft Pen Tools, go to Learning Pen Basics
 - Pen Quick Reference:



delete word



tab



delete



paste



edit text



cut



backspace



undo



space



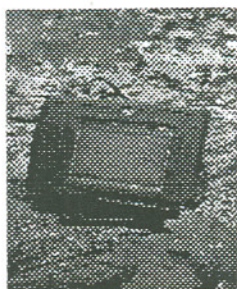
copy



new line



extend



HARDBODY™ PC SPECIFICATIONS

- Processor - 80486DX4
- CPU Clock Speed - 75MHz
- Computer Memory - 8MB, expandable to 32MB
- Disk Memory - Fixed 260MB rugged hard disk drive, IDE controller, higher capacity disk drives planned
- LCD Display - 6" diagonal, 4.79" x 3.59" viewing area, 640 x 480 resolution, 64 level gray scale
- Touch Screen - 2048 x 2048 resolution, pen or finger activated
- Two PCMCIA Slots - (1) Type I or II, (1) Type I, II or III
- Serial Ports - (2) RS-232C, up to 115.2 Kbaud, one port may be configured as RS-422 or RS-485
- Other Ports - Enhanced Parallel Port, External Color VGA Monitor, Floppy Disk Drive, Keyboard.
- Regulatory Compliance - EMI/RFI - FCC Part 15, Class A and B

BATTERY

- Nickel Metal Hydride (NiMH), 18.4 w-hrs. with 3 to 8 hour life expectancy depending on application.
- Battery is hot-swappable in suspend mode.
- Battery life expectancy is based on 25% operating, 50% standby and 25% suspend mode.
- Three automatically invoked power management modes (Doze, Standby and Suspend) extend battery life when the Hardbody PC is not being actively used.

MECHANICAL SPECIFICATIONS

- Dimensions - 6 3/8" x 9" x 2 1/8" overall
- Weight - 3 lbs., 2 oz. with internal battery, 2 lbs., 7 oz. without battery

OPERATING ENVIRONMENT SPECIFICATIONS

- Temperature - -10°C to 50°C
- Shock - 20G, 6 ms (4 ft. drop per MIL-STD-810E)
- Vibration - 2G, 5-200 Hz (MIL-STD-810E)
- Enclosure - Protected against windblown dust, rain, and splashing water.
- Humidity - 0 to 95% RH, non-condensing

AVAILABLE OPTIONS

- Upgrade to 16MB memory
- Upgrade to 24MB memory
- Upgrade to 32MB memory
- External floppy disk drive, 3.5", 1.44MB
- Small footprint keyboard

ACCESSORIES

- 120/240VAC to DC adapter
- Cigarette lighter adapter (12V)
- Battery charger stand (120V & 240V, 2 batteries)
- Spare rechargeable NiMH battery
- Spare touchscreen pen

APPLICATION INTERFACE OPTIONS

- FAX/Modem, 14.4 or 28.8MB
- Ethernet Adapter
- Spread Spectrum LAN Adapter
- CMOS memory module, 256K, 512K, 1M or 2M
- Flash memory, 10, 20, 40 or 80 MB
- PC card disk memory, 170, 260MB
- GPS PC card adapter
- Sound PC card adapter
- Camera with PC card adapter

APPLICATION SOFTWARE PLATFORMS

- MS DOS 6.22
- Windows for Workgroups™ 3.11
- Pen for Windows 1.1
- All Points Field Pack Mobile data collection software
- FieldPack Mobile Professional including MapInfo GPS/GIS mapping software package

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Material Description TS532P

DESCRIPTION:

TS532P is ideal for printed circuit board applications. The polyester is resistant to water, mild acids, salt and alkalis, most petroleum based greases, oils, and lower aliphatic solvents. The adhesive offers excellent high temperature performance, has good resistance to cold and moisture, and the peel adhesion is high and increases over time. This material provides good image clarity, abrasiveness and chemical resistance when used with Computype's premium resin ribbons. The polyester liner makes this product a good choice for automatic label applicators.

CONSTRUCTION:

TOP COATING	NA - material is compatible with hard resin ribbons	
BASE MATERIAL	Thickness	.004" nominal
	Material	white heat stabilized polyester
ADHESIVE	Thickness	.002" nominal
	Material	permanent acrylic
LINER	Thickness	.002" nominal
	Material	clear polyester

RIBBON COMPATIBILITY:

	<u>Datamax</u> All except Ovation	<u>Zebra</u> All Models	<u>Eltron</u> TLP2242/3642	<u>Intermec</u> 3240/3440
1st Choice	TR607	TR607Z	TR611HZ	TR607Z
2nd Choice	TR601	TR601Z	NA	TR601Z
3rd Choice	TR605	TR605Z	NA	TR605Z
Datamax Ovation: 1st - TR611H				

CHARACTERISTICS:

Service Temperature Range: -40 F to +400 F (-40 C to +205 C)

Minimum Application Temperature: +40 F (+4 C)

Typical Minimum Narrow Bar Width: Step Ladder Orientation - .010", Picket Fence Orientation - .005"

Using certain printer, ribbon, heat, and speed combinations a smaller narrow bar width may be achieved.

Typical Automatic Applicator/Dispenser Use: Never Tested Poor Fair Good EXCELLENT
Label size and orientation will affect performance. Specific designs must be individually tested for viability.

To assure maximum performance, Sigma Systems materials have been designed and tested for compatibility between the label stock and thermal transfer ribbon. All Sigma Systems materials are sold as a packaged system containing label stock, transfer ribbon and a print head cleaning kit.

All technical information and recommendations are believed to be accurate but do not constitute a guarantee or warranty. Suitability for any given application is the responsibility of the user. Computype reserves the right to change specifications without notice.

If you have further questions, please call Sigma Systems at 612-633-0633 or 800-328-0852.

Revised: 2/25/97

Examples of USCG labels

USCG1



102938475

USCG2



1234ASDFG

1234LKJHG

USCG3



ASDFGHIJ

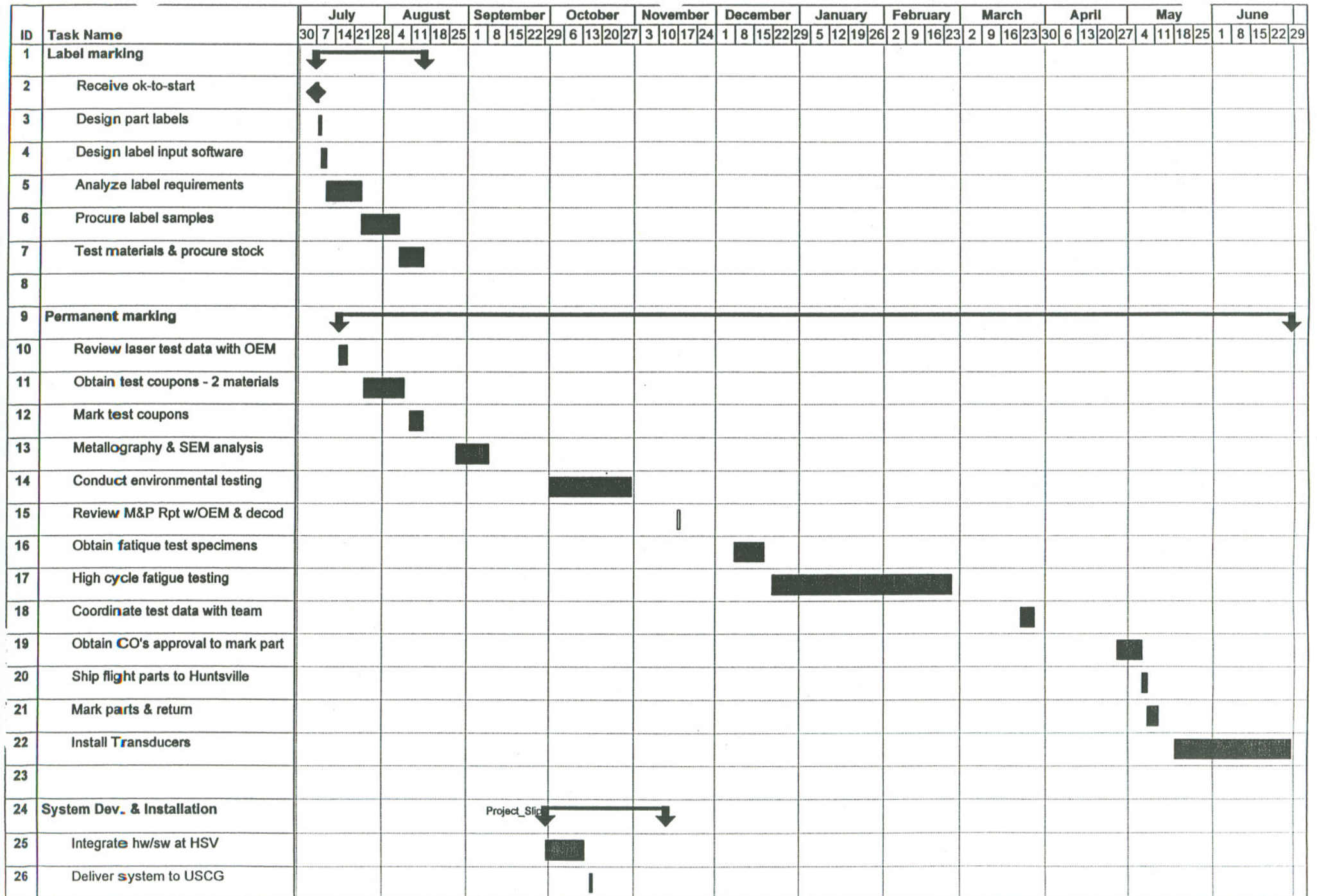
ZYXWVWXY

QWERTYUIO



abc123456789

THIS DATA IS ALSO IN APPENDIX F.



U.S. Dept. of Justice Act Schedule

[illegible]

Author: Lisa F. Johnson at SHVS_555_01

Date: 10/13/97 8:08 AM

Priority: Urgent

Request: Requested

Requester: Jecky P. Martin

Requestor: Dave A. Wilks

CC: Laura A. Moffett

CC: Lisa F. Johnson

Subject: Final list of equipment being shipped to the USCG

----- Message Contents -----

Equip on Bailment

HardBody Computer (Manuals and Cables) BN009572

HardBody Battery Charger s/n 00008LCY

HardBody Soft case

RangeLan2 PCMCIA cards s/n 740005-71800400 3 Duracell

Rechargeable batteries

Metanetics Reader & s/w s/n RQ645B1008

Battery Pack

Welch Allyn Reader s/n 00295

Norand Access Point FO030600

Equipment to be left at USCG

Eltron Printer (power cable and serial cable) StrandWare s/w
and manuals (USCG purchase)

StrandWare s/w (BNA purchased for USCG)

MixMedia s/w and manuals

Labels and Ink (BNA purchased for USCG)

New computer ?

WinWedge BNA2526 (BNA purchased for USCG)

Equipment to be shipped back from the USCG on October 31, 1997

NEC Computer NO177488

NEC Computer NO177487

Metanetics Reader DEMO-R055

Metanetics Reader DEMO-R060

Metanetics Reader (Will be sent from vendor on bailment)

Battery Pack (")

CodeWriter Printer NO177545

RangeLan2 PCMCIA 740005-71900189

RangeLan 2 PCMCIA

Veritec Reader NO177523

Trekker (I'm still debating taking this)